

REMARKS

The claimed invention provides a solid, which is stable during storage and which can be dispersed in water without the use of additional solvents or low-viscosity polyethers. In contrast to the conventional dispersions, the present invention affords virtually unrestricted storage stability, it desirably reduces transport costs because it avoids the need to transport the unreacted component water, and the end user can desirably formulate the solids content and required spray viscosity on an individual basis. Nowhere is either the present invention or its attendant advantages disclosed or suggested in the prior art, and the claims are thus believed to present patentable subject matter, as now discussed.

The rejection of Claims 2-11, 13-20, 25, 27 and 28 under 35 U.S.C. § 102(b) as anticipated by either one of U.S. 5,508,370 (Reiff et al '370), U.S. 5,693,737 (Reiff et al '737), or U.S. 5,607,482 (Reiff et al '482), is respectfully traversed.¹

Reiff et al '370 discloses blocked polyisocyanates having molecular weights of 800 to 500g/mol, an NCO functionality of 2.2-4.5, and an NCO content of 5-20%. These hydrophilic blocked polyisocyanates are processed directly to the corresponding dispersions using either auxiliary solvents or low-viscosity polyethers. Solid, blocked, water-dispersible polyisocyanates are not disclosed.

In Reiff et al '482, the hydrophilic blocked polyisocyanates are processed directly to the corresponding dispersions. Again, auxiliary solvents or low-viscosity polyethers are required, and solid blocked polyisocyanates are not disclosed or suggested.

¹ As Reiff et al '737 is a divisional application of Reiff et al '370, and thus has the same disclosure, discussion in the text will be with respect to Reiff et al '370 only. The term "the Reiff et al patents" is used in the text when an argument applies to any of them.

The Examiner continues to find that the above Reiff et al patents disclose an embodiment of their invention wherein the blocked isocyanate adduct is solid and may be dispersed simply by adding the adduct to water.

In reply, the Reiff et al patents neither disclose nor suggest the presently-claimed **pulverulent** materials. Nor is there any disclosure or suggestion in the Reiff et al patents that their hydrophilic blocked polyisocyanates are of a type obtained in the presence of a water-free, organic auxiliary solvent.

In the present Office Action, the Examiner finds that even in the form of a dispersion, the disclosed blocked polyisocyanate adduct of the Reiff et al patents are in the form of discrete particles. The Examiner cites column 12, line 10 of Reiff et al '737.

In reply, said passage in Reiff et al '737 describes an average diameter of 50 to 500 mμ. However, "mμ" means millimicrons, which is the same as nanometers. In other words, the average diameter is .05 to 0.5 μm, or below the presently-recited minimum of 1 μm. In addition, Reiff et al '737 discloses a preference of 100 to 300 mμ (column 12, lines 12-13), and thus actually teaches away from the presently-recited minimum particle diameter. The other Reiff et al patents also disclose the same preference for average diameter. See column 12, lines 12-13 of Reiff et al '370 and column 10, lines 50-51 of Reiff et al '482.

For all the above reasons, it is respectfully requested that the rejections over the Reiff et al patents be withdrawn.

The rejection of Claim 21 under 35 U.S.C. § 103(a) as unpatentable over any of the Reiff et al patents, further in view of U.S. 6,096,805 (Lange et al), is respectfully traversed. Lange et al does not remedy any of the above-discussed deficiencies of the Reiff et al patents. The Examiner relies on Lange et al for a disclosure of combining hydrophobic blocked polyisocyanates with hydrophilic blocked isocyanates. Nevertheless, even if hydrophobic

blocked isocyanates were combined with the blocked polyisocyanates of the Reiff et al patents, the result would still not be the presently-claimed invention.

For all the above reasons, it is respectfully requested that this rejection be withdrawn.

The rejection of Claims 2-11, 13-21, and 27 under 35 U.S.C. § 112, second paragraph, is respectfully traversed. Indeed, the rejection is now moot in view of the above-discussed amendment. Accordingly, it is respectfully requested that it be withdrawn.

The rejection of Claims 2-11, 13-21, 25, 27 and 28 under 35 U.S.C. § 112, first paragraph, is respectfully traversed. The Examiner holds that the disclosure is enabling only for particular percentage ranges, as disclosed for the respective reactants. In reply, Examples 1 and 2 clearly describe how one skilled in the art would be able to make the presently-claimed solid, pulverulent, water-dispersible, blocked polyisocyanate adduct without limitation as to particular percentage ranges. Indeed, the description at paragraphs [0020] through [0029] and [0036] through [0044] is ample description of how to make the **presently-claimed** invention.

For all the above reasons, it is respectfully requested that this rejection be withdrawn.

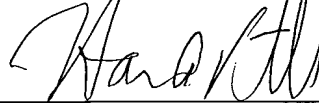
Applicants respectfully submit that all of the presently-pending and active claims in this application are now in immediate condition for allowance. Since the withdrawn claims contain all the limitation of the active claims, they are necessarily patentable as well.

Application No. 09/963,423
Reply to Office Action of November 20, 2003

Accordingly, the Examiner is respectfully requested to pass this application to issue with all pending claims.

Respectfully submitted,

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